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## A Content Analysis of the Studies in Special Education Area

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### Abstract

The aim of the present study is to review the articles in special education area. Four hundred articles were identified based on a comprehensive literature search and examined for this study. The articles published in seventeen prominent special education journals between 2009 and 2014 were categorized based on specific criteria. These criteria are the year of publication, name of journals, number of authors, countries of the researchers, research field, method, characteristics of the research sample and the number of the references cited in the studies. This study is a content analysis of the articles published between 2009 and 2014 and provides an opportunity to identify current research topics, methods, and citation trends in the area of special education. The results of the study suggests that most of the studies were conducted in 2012 and in America. Particularly, individuals with physical disabilities were most frequently selected as the sample group of the studies. It was also detected that most of the articles used experimental research methods. Various results were obtained from this study and discussion, future implications and limitations of the study are provided.

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**Keywords:** special education, content analysis, children with special needs

### 1. Introduction

In recent years, there has been a significant increase in the number of studies in the area of special education. Special education research plays a crucial role in influencing and informing special education practices. In order to obtain information about the research in the area of special education, it is important to examine professional academic journals. McLeskey (2004) stated that academic journals are the most significant resource for special education professionals and have a considerable impact in the area of special education in terms of policy and

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practice. Articles published in academic journals provides a perspective about evidence-based practices in special education in order to obtain information about current trends in special education research and applications.

The concept, scope, purpose of special education and which individuals will benefit from special education is based on certain criteria and rules. According to the definition provided by Ataman (2003), special education is the form of education which aims to gain skills to children with special needs which help children with special needs to be independent and productive individuals. Nevertheless, according to special education legislation of Turkey, special education aims to gain individuals with special needs to grow up as a productive and happy citizen who achieve social roles, establish good relationships with others, work with cooperation, live independently in the society, develop basic living skills about being self-sufficient, prepare for life, higher education and occupational life with the use of appropriate education programmes, special method, personnel and material based on their educational needs, capabilities, interests and talents through the general purpose and basic principles of Turkish national education (MEB, 2012).

Furthermore, according to special education legislation of Turkey, individuals with special needs are categorized as individual with severe disability, individual with multiple disabilities, individual with very severe disability, individual with attention deficit hyperactivity disorder (ADHD), individual with language and speech disorder, individual with visual impairment, individual with mild disability, individual with hearing impairment, individual with moderate disability, individual with physical disability, individual with autism, individual with learning disability, individual with cerebral palsy, individual with chronic disease, gifted individuals and individual with mental retardation (MEB, 2006).

It is seen that there are some content analysis studies about the studies in special education area. Mastropieri, Berkeley, McDuffie, Graff, Marshak, Conners, Diamond, Simpkins, Bowdey, Fulcher, Scruggs and Cuenca-Sanchez (2009) made a content analysis study in order to identify the intervention research trends, practice and policy in special education. They examined the articles published in eleven special education journals and concluded that there is a need for more intervention research in the field of special education in order to strengthen both the quality and quantity of intervention research in special education. Similarly, Gul and Diken (2009) made a content analysis study examining the postgraduate thesis studies about early childhood special education done in Turkey. Based on the results of their study, Gul and Diken (2009) figured out that there were 24 thesis in total about this topic and the mostly studied subject was teaching skills to children with special needs.

The keywords of the present study were selected based on the categorization of the special education legislation of Turkey. If researchers learn about such patterns and trends in the area of special education, they could be able to give direction and determine what to study in order to develop and strengthen this area. Therefore, in the light of the literature mentioned above and in line with this aim, content analysis is applied for the purposes of the study.

### *1.1. Aim of the study*

The aim of this study is to determine the current trends in the special education studies published in prominent academic journals between 2009 and 2014 and synthesize the results of these investigations in the area of special education and identify the current research topics.

## **2. Method**

In order to identify the current research topics in the area of special education, content analysis method was used in the present study. Content analysis is a widely used qualitative research method which includes screening printed or visual materials systematically and analyzing them based on identified categories thematically (Saban, 2009; Camnalbur, Bayraktar & Amuce, 2013). When the results from different articles or studies are compared, it would enable us to obtain a comprehensive understanding about the studies in a specific area or a specific concept (Khakpour, 2012). In order to determine which articles to select for the study, some selection criteria were identified. Seventeen academic journals in the area of special education were examined based on the identified keywords. Keywords selected for the study were special education, disability, down syndrome, dyslexia, autism, cerebral palsy, attention deficit hyperactivity disorder (ADHD), children with special needs, learning disability, mental retardation and gifted children. The articles published between 2009-2014 were selected for the study. As a

result of the examination, 400 articles which include the keywords were selected and examined based on the selection criteria.

### 2.1. Content Analysis Criteria

- Year of publication
- Name of journals
- Number of authors
- Countries of the researchers
- Research area
- Method
- Research sample
- Number of the references cited in the studies

### 2.2 Data Analysis

Following content analysis, all of the obtained data were recorded in a database. This database was formed based on the selection criteria and the results were analyzed in the 20th version of SPSS Statistics Programme.

## 3. Results

In the results section, the descriptive statistics, frequencies and percentages of the results based on each criteria are provided.

### 3.1 Distribution of the articles based on the year of publication

Table 1: Distribution of the articles based on the year of publication

Year of Publication	Frequency	%
2009	58	14.5
2010	71	17.8
2011	57	14.2
2012	80	20.0
2013	68	17.0
2014	66	16.5

In table 1, the descriptive statistics, frequencies and percentages for publication year of the articles are demonstrated. As it can be seen, the highest number of publication is in 2012 (f=80, 20.0%) and the lowest number of publication is in 2011 (f=57, 14.2%). It can be said that there is not a increase in the number of articles through the years.

### 3.2 Distribution of the articles based on the name of the journals

Table 2: Distribution of the articles based on the name of the journals

Name of the Journal	Frequency	%
African Journal of Disability	13	3.2
American Educational Research Journal	2	0.5
Canadian Journal of Disability Studies	16	4.0
Cypriot Journal of Educational Sciences	8	2.0
Elementary Education Online	6	1.5
International Journal of Disability, Community and Rehabilitation	11	2.8
International Journal of Early Childhood Special Education	30	7.5
International Journal of Special Education	144	36.0
Journal for the Education of the Gifted	43	10.8
Journal of Communication Disorders, Deaf Studies and Hearing Aids	4	1.0
Journal of Disability Policy Studies	18	4.5
Journal of Dyslexia	10	2.5
Journal of Intellectual Disability Research	14	3.5
Journal of Neurodevelopmental Disorders	7	1.8
The Future of Children	7	1.8
Journal of Special Education and Rehabilitation	35	8.8
The Journal of Special Education	32	8.0

As it can be seen from table 2, there are various special education journals which made publications between the years 2009 and 2014. Among these journals, International Journal of Special Education has the highest number of published articles (f=144, 36.0%) and American Educational Research Journal has the lowest number of articles (f=2, 0.5%).

### 3.3 Distribution of the articles based on the number of authors

Table 3: Distribution of the articles based on the number of authors

Number of Authors	Frequency	%
1	109	27.2
2	134	33.5
3	78	19.5
4	48	12.0
5	16	4.0
6	8	2.0
7	5	1.2
8	1	0.2

In table 3, the distribution of articles based on the number of authors are provided. As it can be seen, most of the articles have been written by 2 authors (f=134, 33.5%). The second majority group of the articles were written by single author (f=109, 27.2).

### 3.4 Distribution of the articles based on the countries of the authors

Table 4: Distribution of the articles based on the countries of the authors

Number of Authors	Frequency	%
America	157	39.2
China	53	13.2
Canada	27	6.8
Turkey	27	6.8
England	20	5.0
Australia	17	4.2
Africa	13	3.2
The United Arab Emirates	10	2.5
Greece	8	2.0
Sweden	7	1.8

In table 4, distribution of the articles based on the countries of the researchers are provided. There were a total number of 29 countries which have been indicated as the countries of the authors. However, the first 10 most frequently indicated countries were illustrated in table 4. According to table 4, it can be seen that most articles have been published by the authors from America ( $f=157$ , 39.2%) and as the second frequent country of the authors, there were 53 authors from China (13.2%). Besides, there were fewer authors from Sweden among the first 10 countries ( $f=7$ , 1.8%).

### 3.5 Distribution of the articles based on the research fields

Table 5: Distribution of the articles based on the research fields

Research Field	Frequency	%
Physical Disability	117	29.2
Learning Disability	52	13.0
Special Education	87	21.8
Dyslexia	11	2.8
Autism	65	16.2
Hearing Impairment	5	1.2
Down Syndrome	6	1.5
ADHD	10	2.5
Giftedness	45	11.2
Cerebral Palsy	2	0.5

In table 5, distribution of the articles based on the research fields are demonstrated. As mentioned before, these research fields were also the keywords of the study. As it can be seen, there were 117 articles (29.2%) about physical disability and there were 87 articles (21.8%) about special education. Cerebral Palsy has been found as the least frequently studied research field with 2 number of articles (0.5%).

### 3.6 Distribution of the articles based on the research methods

Table 6: Distribution of the articles based on the research methods

Research Method	Frequency	%
Literature Review	82	20.5
Qualitative Research	99	24.8
Interview	9	2.2
Experimental Method	210	52.5

In table 6, distribution of the articles based on the research methods used are provided. According to table 6, experimental methods are the most frequently used research method ( $f=210$ , 52.5%). Besides, 99 articles used qualitative research method (24.8%), 82 articles used literature review (20.5%) and 9 articles used interview method (2.2%).

### 3.7 Distribution of the articles based on the research sample

Table 7: Distribution of the articles based on the research sample

Research Sample	Frequency	%
Individuals with physical disability	121	30.2
Parents	12	3.0
Individuals with learning disability	55	13.8
Children with special needs	29	7.2
Individuals with hearing impairment	11	2.8
Individuals with dyslexia	9	2.2
Individuals with autism	61	15.2
Special education teachers	42	10.5
Individuals with down syndrome	6	1.5
Children with ADHD	10	2.5
Gifted individuals	42	10.5
Children with Cerebral Palsy	2	0.5

In table 7, distribution of the articles based on the research sample are provided. As demonstrated in table 7, the research sample of the articles mostly consisted of individuals with physical disability ( $f=121$ , 30.2%). Additionally, only 2 of the articles (0.5%) conducted with individuals with cerebral palsy.

### 3.8 Distribution of the articles based on the number of references

Table 8: Distribution of the articles based on the number of references

Number of References	Frequency	%
4-20	63	15.8
21-37	156	39.0
38-54	97	24.2
55-71	44	11.0
72-90	19	4.8
91-107	9	2.2
108 and above	12	3.0

In table 8, distribution of the articles based on the number of references are provided. As it can be seen, the mostly used number of references was between 21 and 37 (39.0%). Besides, only 9 (2.2%) articles used references between 91 and 107.

## 4. Discussion and Conclusions

Special education has begun to be frequently studied by the researchers especially in recent years and the aim of the present study was to reveal the current trends in the special education research. A total number of 400 articles published in eleven prominent special education journals were examined based on various criteria. Various results

were obtained from this study which examined the scientific studies about special education based on different criteria. It is seen that there was not a steady increase in the number of studies conducted between 2009-2014. Based on the results, it was figured out that special education has been mostly studied in the year of 2012. This is inconsistent with the findings in the literature. Tiryakioglu (2014) figured out that there was an increase in the number of studies about special education between the years 2010 and 2013. In the future years, more studies should be done in order to develop and strengthen the special education area. Besides, researchers should be encouraged and made aware to study more about special education in order to increase the orientation towards this issue.

According to the results of the study, it was determined that research about special education were mostly conducted in America. Based on the same result, it was also figured out that China, Canada and Turkey were the countries in which the studies about special education were conducted intensively. Future studies should compare the practice areas and properties of special education practices among various countries and identified differences should be clearly revealed.

Another result from the present study indicated that the number of studies with two authors were predominant. This obtained finding revealed that researchers prefer a cooperative process when conducting their special education research. It is suggested that future studies should also make cooperative research in order to be able to provide more comprehensive and objective results. Nevertheless, it was also pointed out that most studies on special education were made about physical disability and similarly most research was conducted with individuals with physical disability. This result revealed that there was a special interest to physical disability by the researchers. Therefore, it could be interpreted that more studies are needed about other categories of disability such as mental retardation, learning disability, visual and hearing impairment.

In the scientific studies about special education, it has been shown that the mostly used method is experimental research methods. Additionally, the number of interview method in the studies was a quite a few. About this result, it can be interpreted that future research might use interview method as a qualitative research method more frequently in order to obtain information about the opinions of parents, teachers or individuals with special needs. For instance, Lozic (2014) stated that based on the interviews with special education teachers, a comprehensive information was obtained about their opinions regarding the increase in the number of inclusive students with autism in general education.

Furthermore, data related with number of references used in studies on special education revealed that the mostly used number of references was between 21 and 37. This high number of cited references in the research might be related with the easier access to available prestigious databases such as ScienceDirect, Web of Science and ERIC (Keser and Ozcan, 2011).

In conclusion, this study aimed to reveal the current trends in special education research. Based on the results of the study, various data were obtained about the patterns in special education research including publication year, name of the academic journals, number of authors, countries of the authors, research field, research method and number of references cited in the articles. Overall results indicated that there is a need for more research in the area of special education. It is really important to have more information about special education in order to improve rights of the individuals with special needs, educational systems, policy and practices in special education area (Minou & Manuchehr, 2012). For instance, the use of technology-assisted instruction in special education is a new area and learning about the trends in special education research would provide a perspective about the new trends in special education (Girgin, Kurt & Odabasi, 2011).

Besides, there are some limitations of the present study. Firstly, this study was a content analysis study and the articles were selected based on determined keywords from eleven special education journals. Articles including different keywords and from different journals or databases might reveal different results. Therefore, future studies should analyse articles including different keywords from different academic special education journals. This could also affected the results of the study in which the articles were from academic journals written in English and from different countries. Making a content analysis study especially about the studies in Turkey would also allow us to determine the current trends in the special education research in Turkey in order to develop a perspective about the national situation as well.



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